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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ATSUSHI OGAWA and SHINICHI SAKAI

Appeal 2009-014619
Application 10/539,662
Technology Center 3700

Before LORA M. GREEN, JEFFREY N. FREDMAN, and
STEPHEN WALSH, *Administrative Patent Judges*.

WALSH, *Administrative Patent Judge*.

DECISION ON APPEAL¹

This is an appeal under 35 U.S.C. § 134(a) involving claims to an indwelling implant for embolization. The Patent Examiner rejected the claims on the ground of obviousness. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE

Claims 1-8, which are all the pending claims, are on appeal. Claim 1 is representative and reads as follows:

1. An indwelling implant for embolization comprising a coil composed of a metal and a substantially semispherical rounded head portion at the distal end portion of the coil, wherein a single closed loop is provided inside said coil from said head portion toward the proximal end portion of the coil, and an axial extension controlling member composed of at least one wire material which is thinner than the metal wire material forming said loop is provided inside said coil by extending the member in the coil axial direction of said coil and fixing both ends thereof directly or indirectly to the proximal end portion after the member passed through said loop,
wherein the single closed loop is directly fixed to the rounded head portion and directly coupled to the axial extension controlling member.

The Examiner rejected the claims as follows:

- claims 1-4 and 6-8 under 35 U.S.C. § 103(a) as unpatentable over Ken,² Bashiri,³ and Teoh;⁴ and
- claim 5 under 35 U.S.C. § 103(a) as unpatentable over Ken, Bashiri, Teoh, and Wilson.⁵

OBVIOUSNESS

The Issue

The Examiner's position is that "Ken discloses the claimed device except for the axial extension controlling member being composed of at least one wire material which is thinner than the metal wire material forming said

² Christopher G. M. Ken et al., US 6,013,084, issued Jan. 11, 2000.

³ Mehran Bashiri et al., US 6,468,266 B1, issued Oct. 22, 2002.

⁴ Clifford Teoh et al., US 2004/0002732 A1, published Jan. 1, 2004.

⁵ Peter Wilson et al., US 2004/0034363 A1, published Feb. 19, 2004.

loop [from the head portion toward the proximal end portion of the coil], the loop being a single closed loop that is directly fixed to the rounded head portion.” (Ans. 4.)

The Examiner first found that Bashiri taught “coil 120 with an axial extension controlling member 134 composed of at least one wire material . . .” (*Id.*) The Examiner concluded that it would have been obvious to use Bashiri’s wire axial extension controlling member in Ken’s device “in order to ensure a secure engagement with the loop . . .” (*Id.* at 5.)

The Examiner next found that Teoh taught “a vaso-occlusive coil with a single closed loop 170 that is directly fixed to a rounded head portion 182.” (*Id.*) The Examiner then concluded it would have been obvious to provide Teoh’s single closed loop directly fixed to Ken’s rounded portion because “a closed loop configuration is identified as a coupling mechanism to other portions of [Teoh’s] vaso-occlusive device (page 5, paragraph 52), which is well known in the art for secure linking or attachment of segments along a device.” (*Id.*)

Appellants contend that “Bashiri teaches the same structure” as Ken. (App. Br. 9.) According to Appellants, “the combination of Bashiri, Teoh and Ken makes no sense.” (*Id.* at 11.) Further, “Teoh teaches against Applicant’s stated purpose” and “away from any combination of Teoh, Ken and Bashiri.” (*Id.* at 12.)

The issues with respect to this rejection are:

did Bashiri teach the same structure as Ken, thus providing no suggestion to modify Ken; and

did Teoh teach away from Applicants’ purpose and away from any combination of Teoh, Ken, and Bashiri?

Findings of Fact

1. Ken's Fig. 10 is reproduced here:

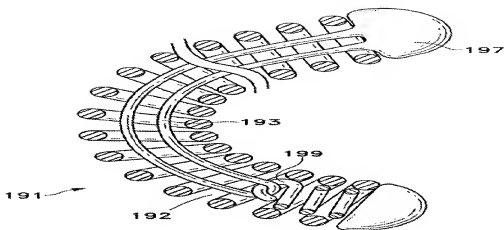


Fig. 10

{FIG. 10 is a longitudinal-section view of Ken's implant device 191 having a coil 192 with semispherical head 197 at the distal end, loop 193 connected directly to semispherical head 197, and loop 193 engaged at the proximal end with hook 199.}

2. Bashiri's Fig. 3 is reproduced here:

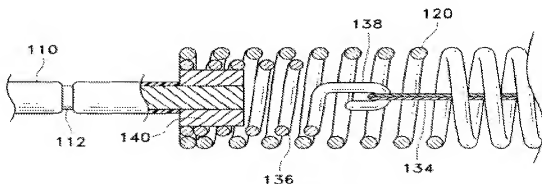
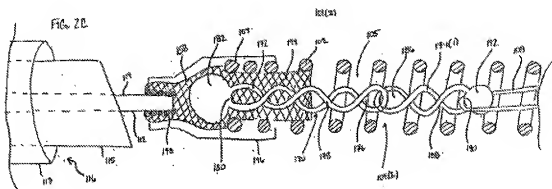


Fig. 3

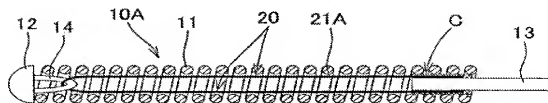
{FIG. 3 is a longitudinal-section view of Bashiri's vaso-occlusive device including the more distal portion of the core wire 110 and coil implant 120.}

3. In Bashiri's Fig. 3, implant 120 is a helically wound coil having a stretch-resistant member 134 through its center lumen. Anti-stretch member 134 may be of any suitable material, e.g., metallic wire or polymeric threads. (Bashiri, col. 5, ll. 58-64.)
4. We find that Bashiri's anti-stretch wire 134, and Ken's hook 199, have proximal locations with respect to the distal end of the implants.
5. Teoh's Fig. 2C is reproduced here:



{FIG. 2C shows a longitudinal-section view of Teoh's vaso-occlusive device.}

6. Appellants' Fig. 1 is reproduced here:



{FIG. 1 is a longitudinal-section view of an example of Appellants' implant device showing distal end semi-spherical head 12 welded to loop 14, with metal wire axial extension controlling member 20 having ends fixed at the proximal end of the device. (Spec. 8-10.)}

Principles of Law

A rejection for obviousness must include “articulated reasoning with some rational underpinning to support the legal conclusion.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007), quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 550 U.S. at 416.

Analysis

We agree with the Examiner that Bashiri’s device had a different structure from Ken’s device. More specifically, where Ken provided hook 199 engaging the loop that was fixed to Ken’s distal head, Bashiri provided anti-stretch member 134 made of wire engaging a loop coupled in tandem to the distal end of Bashiri’s device. (FF1-4.) We therefore reject Appellants’ argument that the Bashiri and Ken devices were the same. The Examiner found that Bashiri’s wire would be expected to provide more secure engagement for Ken’s loop 193 than hook 199 did, and concluded it would have been obvious to replace Ken’s hook 199 with Bashiri’s wire 134 to gain that more secure engagement, and also to prevent the coil from stretching. (Ans. 5.) Appellants’ arguments do not come to grips with that reasoning and have not persuaded us the Examiner erred. Because the evidence supports the Examiner’s findings and reasoning on this point, we affirm the rejection of independent claims 1 and 8.

We are also not persuaded that the Examiner erred in relying on Teoh. It appears that Ken and Bashiri rendered independent claims 1 and 8 obvious, and that Teoh was not needed to show the obviousness of the

device defined by those claims. It is not clear why the Examiner discussed providing Ken with a closed loop such as taught by Teoh (Ans. 5), after correctly finding that Ken taught loop 199 and that the only difference between Ken's device and Appellants' device is the wire axial extension controlling member (Ans. 4). However, dependent claim 6, which Appellants do not argue separately,⁶ recites that "the axial extension controlling member is further twisted after insertion through the loop." The Examiner explained that Teoh taught that twists keep the wire from collapsing on itself, and that this teaching of Teoh suggested further modifying the device suggested by Ken and Bashiri. The evidence supports that finding and the conclusion of obviousness that follows from it. As claim 6 ultimately depends from claim 1, claim 1 covers the device of claim 6, and we conclude that the claims were properly rejected over Ken, Bashiri, and Teoh. Appellants' arguments do not come to grips with the Examiner's reasoning on this point, and focus instead on other teachings by Teoh. Even if other Teoh teachings would not have suggested Appellants' device, we cannot agree that a person of ordinary skill in the art would have ignored the Teoh teaching the Examiner did apply. Claims 2-4, 6 and 7 were not argued separately and therefore fall with claims 1 and 8. 37 C.F.R.

§ 41.37(c)(1)(vii).

Claim 5 was separately rejected, but Appellants rely on their arguments concerning claims 1 and 8. (App. Br. 13.) As we found those arguments unpersuasive, we affirm the rejection of claim 5.

⁶ Appellants provide a separate heading for claims 2-4, 6 and 7, and one for claim 5, see App. Br. 13, but do not present specific arguments for those claims.

CONCLUSIONS

Bashiri did not teach the same structure as Ken; Bashiri taught a wire axial extension control member where Ken taught a hook.

The Teoh teachings relied upon in the rejection did not teach away from combination with Ken and Bashiri, and did not teach away from Appellants' purposes.

SUMMARY

We affirm the rejection of claims 1-4 and 6-8 under 35 U.S.C. § 103(a) as unpatentable over Ken, Bashiri, and Teoh.

We affirm the rejection of claim 5 under 35 U.S.C. § 103(a) as unpatentable over Ken, Bashiri, Teoh, and Wilson.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

lp

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